

Water-Data Report CA-2005

11229600 FLORENCE LAKE NEAR BIG CREEK, CA

San Joaquin River Basin

LOCATION.--Lat 37°16'20", long 118°58'17" referenced to North American Datum of 1927, Fresno County, Hydrologic Unit 18040006, unsurveyed, in Sierra National Forest, in gatehouse of Ward Tunnel intake, 0.3 mi west of dam on South Fork San Joaquin River, and 16 mi northeast of town of Big Creek.

DRAINAGE AREA.--171 mi².

WATER-STAGE RECORDS

PERIOD OF RECORD.--November 1925 to current year. Prior to October 1931, published in WSP 721. Maximum and minimum daily contents (water years 1926-39) summarized in WSP 881. Prior to 1960, maximum and minimum daily contents were published.

REVISED RECORDS.--WDR CA-78-3: 1977; WDR CA-02-3: 2001, Extremes for current year.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by Southern California Edison Co.).

REMARKS.--Lake is formed by multiple-arch concrete dam; storage began in April 1925. Usable capacity, 64,406 acre-ft, between elevations 7,220.94 ft, throat of Venturi tube in Ward Tunnel intake (station 11229500), and 7,327.50 ft, top of spillway drum gates. Additional storage of 168 acre-ft is not available for diversion. Water is diverted through Ward Tunnel to Huntington Lake (station 11236000) via Portal Powerplant (station 11235500) and used for further power development in Big Creek powerplants. Records, excluding extremes, represent contents at 2400 hours. See schematic diagram of upper San Joaquin River Basin.

COOPERATION.--Records were collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project nos. 67 and 120. Contents not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 65,990 acre-ft, July 3, 1932, elevation, 7,329.14 ft; minimum occurred during period of no record, Oct. 2-4, 1926, or Nov. 30 to Dec. 2, 1927.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 64,300 acre-ft, July 3, elevation, 7,327.39 ft; minimum, 1,057 acre-ft, Oct. 15, elevation, 7,231.09 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Southern California Edison Co., dated Aug. 26, 1926)

Elevation	Contents	Elevation	Contents	Elevation	Contents
7,222	63	7,245	4,666	7,280	24,588
7,225	281	7,250	6,648	7,290	31,966
7,230	887	7,255	8,950	7,310	48,284
7,235	1,774	7,260	11,608	7,330	66,826

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RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	4,199	1,182	2,233	5,169	1,175	1,198	1,273	1,548	57,846	61,815	58,954	37,599
2	3,733	1,186	2,104	5,415	1,175	1,198	1,281	1,667	59,245	64,118	59,395	36,272
3	3,277	1,193	2,185	5,741	1,179	1,212	1,265	1,925	56,831	63,667	59,565	34,982
4	2,931	1,186	2,264	6,036	1,179	1,210	1,259	2,212	56,266	63,389	59,668	33,805
5	2,669	1,175	2,337	6,291	1,181	1,210	1,299	2,548	55,703	63,331	59,217	32,625
6	2,435	1,170	2,416	6,268	1,182	1,213	1,473	2,551	56,036	63,503	58,729	31,411
7	2,198	1,180	2,508	6,063	1,179	1,233	1,414	2,429	56,599	63,848	58,402	29,909
8	1,961	1,225	2,602	5,834	1,179	1,263	1,323	2,401	57,071	63,599	58,159	28,243
9	1,735	1,232	2,716	5,702	1,175	1,305	1,291	2,576	57,619	63,331	57,824	26,632
10	1,522	1,229	2,847	5,674	1,173	1,350	1,280	2,424	57,973	62,958	57,452	25,045
11	1,314	1,221	2,970	5,523	1,187	1,390	1,326	2,228	58,777	63,101	57,006	23,471
12	1,117	1,200	3,118	5,127	1,201	1,418	1,371	2,176	60,545	63,302	56,497	22,013
13	1,096	1,194	3,260	4,473	1,204	1,471	1,361	2,453	61,833	62,948	55,934	21,379
14	1,068	1,183	3,394	3,743	1,197	1,375	1,367	3,187	62,538	62,347	55,336	20,988
15	1,115	1,178	3,516	2,916	1,206	1,327	1,438	4,916	61,606	61,853	54,849	20,866
16	1,106	1,174	3,631	2,115	1,223	1,293	1,544	7,987	60,867	61,691	54,436	20,893
17	1,122	1,173	3,739	1,375	1,218	1,276	1,670	9,398	60,091	61,824	53,824	20,920
18	1,150	1,173	3,854	1,260	1,211	1,263	1,726	11,020	59,612	61,739	53,279	20,927
19	1,265	1,171	3,952	1,228	1,205	1,269	1,617	12,901	59,414	62,005	52,924	20,948
20	1,359	1,163	4,046	1,226	1,207	1,261	1,412	14,488	59,725	62,147	52,527	20,981
21	1,204	1,142	4,136	1,226	1,215	1,247	1,392	16,098	59,809	62,385	51,584	21,050
22	1,145	1,151	4,217	1,223	1,212	1,261	1,389	18,316	59,357	62,519	50,566	21,097
23	1,140	1,395	4,286	1,219	1,205	1,276	1,354	20,655	59,179	62,329	49,539	21,139
24	1,161	1,501	4,357	1,209	1,202	1,289	1,331	22,801	59,122	61,919	48,486	21,166
25	1,168	1,607	4,429	1,203	1,201	1,269	1,353	25,516	58,383	61,283	47,267	21,200
26	1,163	1,711	4,483	1,197	1,193	1,262	1,416	30,210	57,563	60,375	45,933	21,289
27	1,184	1,827	4,566	1,192	1,188	1,269	1,480	35,464	57,358	60,261	44,486	21,379
28	1,185	1,930	4,666	1,183	1,197	1,264	1,441	40,939	57,470	60,281	42,897	21,468
29	1,184	2,034	4,770	1,181	---	1,240	1,410	45,677	58,057	59,809	41,575	21,530
30	1,179	2,140	4,923	1,176	---	1,224	1,493	49,500	59,433	59,451	40,259	21,585
31	1,176	---	4,997	1,175	---	1,249	---	53,695	---	59,235	38,926	---
Max	4,199	2,140	4,997	6,291	1,223	1,471	1,726	53,695	62,538	64,118	59,668	37,599
Min	1,068	1,142	2,104	1,175	1,173	1,198	1,259	1,548	55,703	59,235	38,926	20,866
Elevation, in feet, at end of month												
	7,231.79	7,236.68	7,245.89	7,231.78	7,231.91	7,232.21	7,233.55	7,316.07	7,322.27	7,322.06	7,298.86	7,275.71
Change in contents, in acre-feet												
	-3,807	+964	+2,857	-3,822	+22	+52	+244	+52,202	+5,738	-198	-20,309	-17,341

	Calendar Year 2004	Water Year 2005
Change in contents, in acre-feet	+3,833	+16,602

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